City of Mountain View
Consumer Confidence Report
Water Quality 2002

Your Water

The City of Mountain View's goal is to provide safe, high-quality drinking water that meets Federal and State Standards. This report describes where the City's water comes from, lists results from water quality tests and explains how to interpret the data.

In 1996, Congress amended the Safe Drinking Water Act, adding a requirement that water systems deliver to their customers a brief annual water quality report, similar to the Annual Water Quality report that California utilities have been distributing since 1990. Consumers have the right to know what is in their drinking water and where it comes from. This Consumer Confidence Report (CCR) has been prepared by the City of Mountain View.

The City of Mountain View annually tests over 1,200 samples to constantly monitor the water distributed to you. The results of the sampling program show Mountain View water meets all regulatory standards.

This report contains important information about your community's water quality. If necessary, please have it translated, or speak with a friend who understands it well.

El informe contiene información importante sobre la calidad del agua en su comunidad. Tradúzcalo o hable con alguien que lo entienda bien.

Bản báo cáo này bao gồm thông tin quan trọng về chất lượng của nước trong cộng đồng quý vị. Nếu cần hãy phiên dịch bản này, hay nói với một người bạn hiểu rõ bản này.

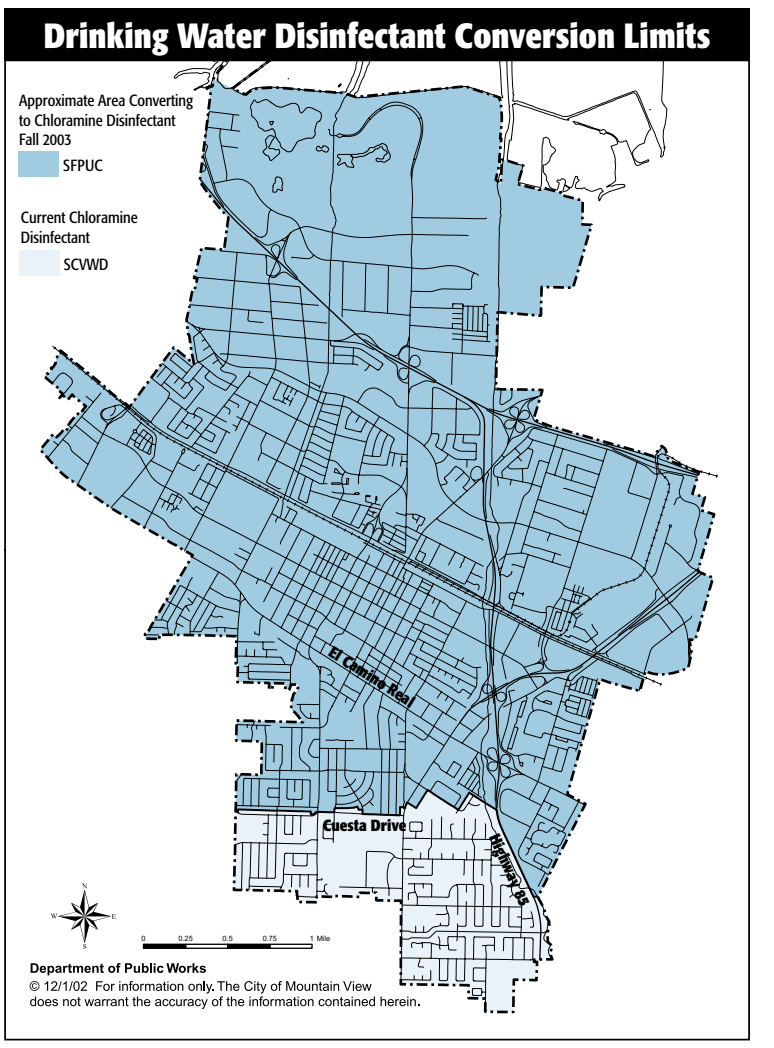
Этот отчет содержит важную информацию о качестве воды в вашем районе. Если это необходимо, пожалуйста, попросите перевести его или поговорите со знакомым, хорошо понимающим содержание отчета.

Chloramine Conversion Program

Making Great Water Better

In fall 2003, the San Francisco Public Utilities Commission (SFPUC) will change its drinking water disinfectant from chlorine to chloramine to ensure even higher quality drinking water for its customers. Chloramine is a time proven disinfectant with documented health benefits. Mountain View receives 90% of its water from SFPUC. The conversion will involve most water users in Mountain View. The Santa Clara Valley Water District (SCVWD), provides Mountain View with the remaining 10%, and has used chloramine as the disinfectant in their drinking water supplies for some time. A small percentage of Mountain View residents are served by the California Water Service Company that also provides chloraminated water. Please refer to the map below to determine if you are included in the conversion.

Chloramine, a combination of chlorine and ammonia, is a more stable, longer-lasting disinfectant that will increase protection of public health, while meeting new, more stringent State and Federal drinking water regulations, lowering risk of bacterial contamination and improving taste and odor. With the conversion to chloramine, Mountain View customers will continue to receive the highest quality water, which meets or exceeds more stringent present and anticipated regulatory standards. The main benefit of chloramine is that it significantly lowers the level of disinfectant by-products, which form when chlorine mixes with natural organic substances in water. Some disinfection by-products, such as trihalomethanes (THMs), are suspected carcinogens and may pose other long-term health effects if present at high levels. THM levels in SFPUC water have remained well below the allowed regulatory level in the past and the change to chloramine will reduce the level of disinfection by-products (including THMs) by one-third. SCVWD water also remains well below the regulatory limit.



Chloraminated water is safe for people and animals to drink and for all other general uses. As with chlorine, three special groups, specifically kidney dialysis patients, aquarium owners and businesses or industries that use water in their treatment process, will need to remove chloramine from the water prior to use. Precautions must still be taken to remove or neutralize chloramine in the kidney dialysis process, in the preparation of water for fish tanks and ponds and in businesses using water in treatment processes and beverage manufacturing. Unlike chlorine, chloramine cannot be removed from water by boiling, or letting an open container stand to dissipate chlorine gas. It can only be neutralized or removed with specific treatment methods.

Mountain View commenced a community outreach campaign which includes articles in the *View*, informational fact sheets and a chloramine information line **(650) 903-6543**. A mail in coupon for fact sheets is included in the Summer edition of the *View*.

Please visit our website **www.mountainview.gov** for more information.

City of Mountain View • Public Works Department • Public Services Division • 231 N. Whisman Road • Mountain View, CA 94043

Mountain View's Water Supply

The City of Mountain View distributes over 4.2 billion gallons of fluoridated water annually to its customers from three separate sources. More than 90 percent of the City's water is treated surface water imported from the Sierra Nevada Mountains and purchased from the San Francisco Public Utilities Commission's Hetch Hetchy System. The remaining water is imported from the Sacramento-San Joaquin Delta and is purchased from the Santa Clara Valley Water District or is groundwater pumped from the deep aquifer through the City's water wells.

Water Quality Data

The table below provides representative analytical results of City of Mountain View water samples collected in 2002. The table contains the name of each substance, the highest level allowed by regulation, the amount detected, the usual sources of such contamination and a key to units of measurement. **Please note**: the simple presence of a substance does NOT necessarily indicate the drinking water poses a health risk. Certain quantities of some substances are essential to good health, but excessive quantities can be hazardous.

To understand the table below, refer to the list and the glossary below and to the right.

SFPUC Water Quality Data 2002(1)(2)

For Systems receiving Bay Division Blend water and Hetch Hetchy and SVWTP water

Detected Contaminants	Unit	MCL (3)	PHG (4)(5) (MCLG)	Range	Average	Typical Sources in Drinking Water
Turbidity (SFPUC Treated Water)						
Turbidity(6)–Tesla Portal (Hetch Hetchy Water)	NTU	5(7)	N	0.20-.66	0.33	Soil run-off
Turbidity(6)–SVWTP	NTU	0.3(8)	N	0.06-0.18	0.08	Soil run-off
Organic Chemicals (City of Mountain View Treated Water)						
Total Trihalomethanes (TTHMs)	ppb	80(9)	N	42.8-62.4	50.1(9)	By-product of drinking water chlorination
Total Haloacetic Acids (HAAs)	ppb	60(9)	N	12.1-30.0	21.2(9)	By-product of drinking water chlorination
Microbiological (City of Mountain View Treated Water)						
Total Coliform	%	5(10)	0	0(10)	0(10)	Naturally present in the environment
Inorganic Chemicals (Source Waters)						
Arsenic(11)	ppb	50	N	<2 - 2	<2	Erosion of natural deposits, soil run-off
Chlorate(11)	ppb	NS	N	<20-27	<20	By-product of drinking water chlorination
Natural Fluoride(12)	ppm	2	1	<0.1-0.2	<0.1	Erosion of natural deposits
Inorganic Chemicals (City of Mountain View Treated Water)						
Chlorine	ppm	MRDL=4(20)	RDLG=4(20)	0.31-0.51	0.42	Drinking water disinfectant added for treatment
Organic Chemicals (SFPUC Treated Water)						
Total Trihalomethanes (TTHMs)(19)	ppb	80	N	47.9 - 50.1	48	By-product of drinking water chlorination
Total Haloacetic Acids (HAAs)(19)	ppb	60	N	18.1 - 33.6	24	By-product of drinking water chlorination
Total Haloacetonitriles (HANs)(12)	ppb	NS	N	1-6	3	By-product of drinking water chlorination
Total Haloketones (HKs)/Chloropicrin (CP)(12)	ppb	NS	N	0.5-7	2	By-product of drinking water chlorination
Total Aldehydes(13)	ppb	NS	N	8-18	12	By-product of drinking water chlorination
Total Organic Halides (TOX)(12)	ppb	NS	N	<110-173	131	By-product of drinking water chlorination
Lead & Copper Rule Study (City of MV Treated Water)	**Unit**	**AL (13)**	**PHG**	**Range**	**90th Percentile**	**Typical Sources in Drinking Water**
Copper (MV Treated Water)	ppb	1300	170	30-270	100(14)	Corrosion of household plumbing systems
Lead (MV Treated Water)	ppb	15	2	<2-24	8(15)	Corrosion of household plumbing systems

Secondary Standards–Source Water(11)	Unit	SMCL(3)	Range	Average
Iron	ppb	300	<100-140	<100
Chloride	ppm	500	<3-7	5
Specific Conductance	µS/cm	1600	13-340	214
Sulfate	ppm	500	0.7-25	17
Total Dissolved Solid (TDS)	ppm	1000	<5-190	114
Secondary Standards–Treated Water(16)				
Color	units	15	<6-24	<10
Odor	TON	3	<1	<1

Other constituents–Treated Water(16)(17)	Unit	SMCL(3)	Range	Average
Alkalinity (as CaCO3)	ppm	NS	13-120	66
Boron(18)	ppb	NS	<100-180	<100
Calcium	ppm	NS	4-31	18
Fluoride–City of Mountain View	ppm	NS	0.8-1.4	0.9
Hardness (as CaCO3)	ppm	NS	11-120	66
Magnesium	ppm	NS	<0.5-11	6
pH	Units	NS	8.6-9.4	9.0
Potassium	ppm	NS	<0.5-1.0	0.5
Silica	ppm	NS	5-6	5
Sodium	ppm	NS	3-22	18

Key

<	Less than
ppb	Parts per billion
ppm	Parts per million
NS	No standard
N	None
NTU	Nephelometric Turbidity Unit (clarity of water)
SVWTP	Sunol Valley Water Treatment Plant
µS/cm	MicroSiemens/centimeter
TON	Threshold odor number

(1) Set forth in 40 CFR Parts 141 and 142 National Primary Drinking Water Regulation and California Code of Regulations, Title 22 Section 116470.

(2) All results met State and Federal drinking water regulations.

(3) Maximum Contaminant Level (MCL) and Secondary Maximum Contaminant Level (SMCL) set by U.S. EPA/DHS.

(4) Public Health Goal (PHG) adopted by the State Office of Environmental Health Hazard Assessment (OEHHA) of the California EPA.

(5) Maximum Contaminant Level Goal (MCLG) set by U.S. EPA.

(6) Turbidity is the water clarity indicator; it also indicates the quality of the water and the treatment system efficiency.

(7) The turbidity standard for unfiltered supplies is 5 NTU.

(8) Filtered water turbidity must be less than 0.3 NTU 95% of the time. SVWTP met this standard 100% of the time.

(9) Compliance is based on 4-quarter running average from Disinfectant/Disinfection Byproducts Rule data in City of Mountain View treated water.

(10) Monthly positive samples in City of Mountain View treated water.

(11) Data obtained from Hetch Hetchy, Calaveras, and San Antonio Reservoirs.

(12) Based on Information Collection Rule data collected in 1998 at Alameda East Portal and SVWTP.

(13) Action Level (AL). The 90th percentile level of lead or copper must be less than the action level.

(14) In 2002, 0 out of 37 residences were over the copper Action Level at consumer taps.

(15) In 2002, 2 out of 37 residences were over the lead Action Level at consumer taps.

(16) Data obtained from Alameda East Portal, and SVWTP.

(17) Note that Chromium, perchlorate, and MTBE were not detected in the source or treated water.

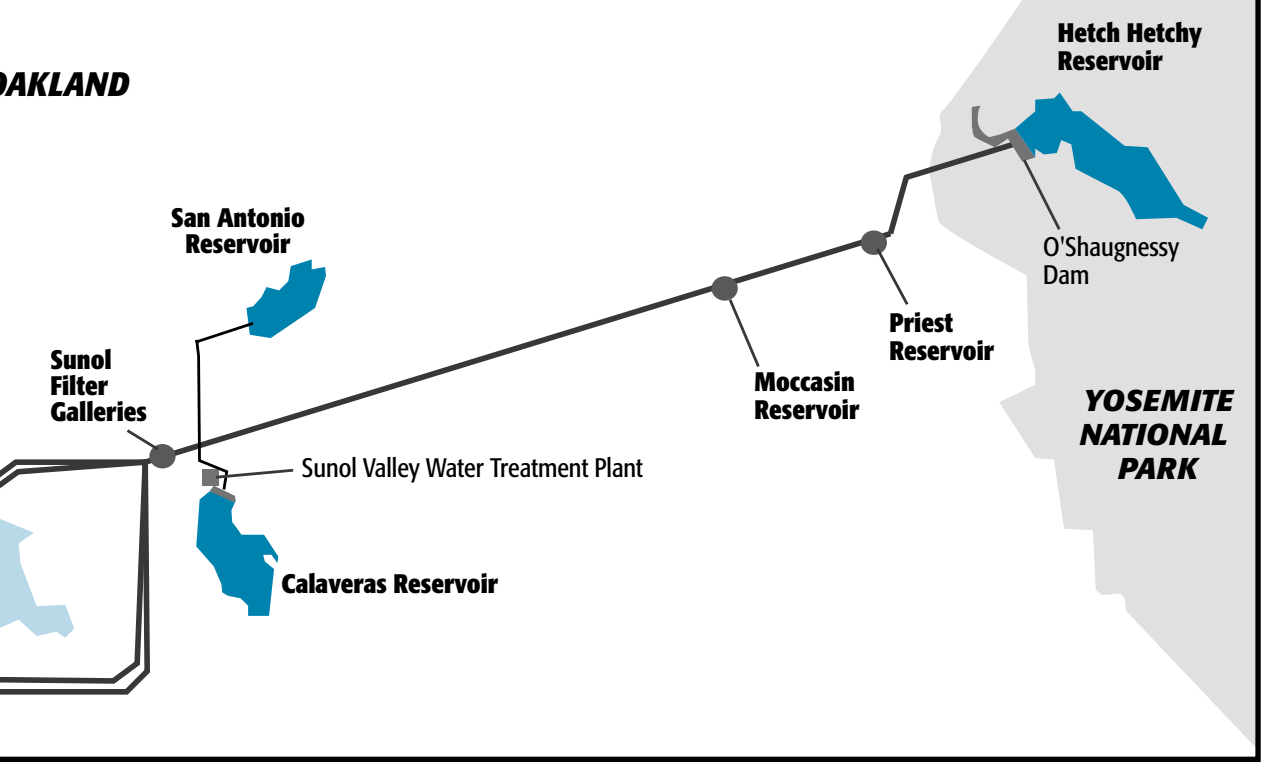
(18) Data obtained from quarterly State UCMR monitoring at Hetch Hetchy, Calaveras, and San Antonio Reservoirs.

(19) Data obtained from 4-quarterly running annual average of Disinfectant/Disinfection by-product Rules (DBPs) monitoring for 8 locations in San Francisco Regional Water System.

(20) MRDL = Maximum Residual Disinfectant Level, MRDLG = Maximum Residual Disinfectant Level Goal.

Note: Additional water quality data may be obtained by calling the **City of Mountain View Public Services Division at (650) 903-6329.**

Hetch Hetchy Water System



Water Quality Summary

Min/Max/Avg: 01/01/02 - 12/31/02

Rinconada Plant, Santa Clara Valley Water District

RWPT Efficient (Treated Water)

Test Parameter	Units	MCL	DLR	MIN	MAX	AVG
Apparent color	Color Units	15		<2.5	<2.5	<2.5
Conductivity	umhos/cm	900-1600-2200		338	743	563
Odor T.O.N.	T.O.N.	NS		1	1	1
pH (Units)	pH units	6.5-8.5		7.3	8.2	7.6
Temperature	Degrees C	NS		12	27	19
Turbidity	NTU	5.0		0.04	0.27	<0.3
Heterotrophic Plate Count	CFU/ml	<500		1	96	7
Total Coliforms	CFU/100	<5% (System)		Absent	Absent	Absent
Ammonia Nitrogen	mg/L	NS		0.1	0.32	0.21
Bromide	mg/L	NS		ND	0.13	0.08
Calcium	mg/L	NS		17	24	21
Chloride	mg/L	250-500-600		32	119	82
Hardness	mg/L	NS		95	155	107
Magnesium	mg/L	NS		10	18	14
Nitrate	mg/L	45	2	ND	5	4
Phosphate	mg/L	NS		0.59	1.43	0.87
Sodium	mg/L	NS		37	82	64
Sulfate	mg/L	250-500-600	0.5	46.7	71.7	60.5
Total Alkalinity	mg/L	NS		58	101	77
Total Organic Carbon	mg/L	NS		1	2	2
UV-254	ABS	NS		0.020	0.050	0.038
Zinc	mg/L	5	0.05	0.23	0.41	0.3
Aluminum	mg/l	1	0.05	0.07	0.07	0.07
Boron	mg/L	NS		0.13	0.2	0.15
Chlorate	mg/L	NS	0.005	0.1	0.2	0.1
Fluoride	mg/L	2	0.1	ND	0.1	0.1
HAA5	ppb	60	5.0	18.0	49.7	28.3
Potassium	mg/L	NS		1.8	4.4	3
Silica	mg/L	NS		7	17	12
THM	ppb	80	0.5	12.7	86.2	45.6
Vanadium	mg/l	NS (AL=0.05)	0.003	ND	0.005	0.003

Glossary

PUBLIC HEALTH GOAL (PHG)
The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are unenforceable targets set by the California Environmental Protection Agency.

MAXIMUM CONTAMINANT LEVEL GOAL (MCLG)
The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's are set by the U.S. Environmental Protection Agency (U.S. EPA).

MAXIMUM CONTAMINANT LEVEL (MCL)
The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs and MCLGs as is economically or technically feasible. Secondary MCLs are set to protect odor, taste, and appearance of drinking water.

PRIMARY DRINKING WATER STANDARD
MCLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

VARIANCES AND EXEMPTIONS
State or EPA permission not to meet an MCL or a treatment technique under certain conditions. The SFPUC has no variance or exemption for MCL's.

TREATMENT TECHNIQUE
A required process intended to reduce the level of a contaminant in drinking water.

REGULATORY ACTION LEVEL
The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Drinking Water Source Assessment

The Drinking Water Source Assessment Protection Program (DWSAPP) is a program to determine how vulnerable drinking water sources are to contaminants such as underground storage tanks, sewer mains or to commercial and industrial uses. Mountain View completed the source assessment for its drinking water wells in August 2002.

Mountain View wells scored moderate to high in physical barrier effectiveness because the City wells are drilled deep into the aquifer and the geology is such that the source is protected from contaminants. Physical barrier effectiveness is the measurement used to determine the contamination potential and high ratings are difficult to achieve in an urban setting because of the various businesses and industries. Mountain View wells may be potentially vulnerable to leaking underground storage. Mountain View actively monitors the water source and conducts additional test for VOC's and MTBE to ensure your source is safe.

The assessment is available for review at the Department of Health Services Drinking Water Field Operations Branch, 2151 Berkeley Way, Room 458, Berkeley, CA 94704.

Copies of the summary can be mailed to you by request by contacting the **Public Services Division** for more information at **(650) 903-6329**.

Is my drinking water affected by VOC's in groundwater at the Federal clean up sites?

No. As explained in a community meeting sponsored by the USEPA, the City's drinking water comes from other sources, such as SFPUC Hetch-Hetchy, deep aquifer wells and treated surface water from the Santa Clara Valley Water District. In addition, Mountain View's drinking water is tested to make sure it meets drinking water quality standards.

For more information, contact **David Cooper, EPA Community Involvement Coordinator** at **(415) 972-3237**.

Monitoring Your Water Quality

Sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

In order to ensure that tap water is safe to drink, the United States Environmental Protection Agency (USEPA) and the California Department of Health Services (DHS) regulates the amount of certain contaminants in water provided by public water systems as well as bottled water.

Drinking water may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the **USEPA Safe Drinking Water Hotline (1-800-426-4791)**.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised people including individuals undergoing chemotherapy, people with HIV/AIDS or other immune system disorders, some elderly and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/ Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Crypto-sporidium and other microbial contaminants are available from the **Safe Drinking Water Hotline (1-800-426-4790)**.

Contaminants that may be present in source water include:

Nitrate: Nitrate in drinking water at levels above 45 mg/L is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in a serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 45mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should seek advice from your health care provider.

Arsenic: EPA is reviewing the drinking water standard for arsenic because of special concerns that it may not be stringent enough. Arsenic, a naturally-occurring mineral is known to cause cancer in humans at high concentrations.

Lead: Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using the water. Additional information is available from the **Safe Drinking Water Hotline (1-800-426-4791)**.

Other contaminants that may be present in source water include:

- **Microbial**, such as viruses and bacteria may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- **Inorganic**, such as salts and metals can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- **Pesticides and herbicides**, may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- **Organic chemicals**, including synthetic and volatile organic chemicals that are by-products of industrial processes and petroleum production and can also come from gas stations, urban stormwater runoff and septic systems.
- **Radioactive constituents**, can be naturally-occurring or the result of oil and gas production and mining activities.

Q and A's

Is my water safe to drink?
Yes. The water in Mountain View meets all State and Federal standards.

Why is my water yellow or brown?
The most common reason for discolored water is household plumbing. When water is not circulated regularly (such as in a guest bathroom or when unused during vacation) it can pick up color from galvanized or copper pipes. A rusting water heater can also discolor water. In addition, distribution mains can accumulate small amounts of sediment that settles out. Opening hydrants and altering normal flow patterns can disturb this sediment. In all cases, letting the water run 5-10 minutes should clear the discoloration.

Why does my water sometimes look cloudy?
Cloudy water can be caused by tiny air bubbles. We often pump water to assist in distribution and this can introduce air into the system and create bubbles. The cloudy appearance will settle out if allowed to stand for a few minutes.

How long can I store drinking water?
Drinking water that has been disinfected, can be stored for six months in capped, plastic containers.

How much water should I store for emergencies?
A good rule of thumb is to store one gallon of water per person per day. Plan for at least 3 days.

Sometimes my water pressure is low. Why?
Department of Health Services requires that a public water system provide more than 25 pounds of pressure. The lowest water pressure in the City system is 50 pounds and every effort is made to keep the water pressure within a 5 pound range.

What types of water conservation programs does Mountain View offer?

FOR RESIDENCES
Home Water-Wise House Call Survey Program: 1-800-548-1882

Irrigation Technical Assistance Program: 1-(408)-265-2607 ext. 2257

Showerhead and Aerators Distribution Program: 1-(408)-265-2607 ext. 2554

Residential Water Efficient Clothes Washer Rebate Program: 1-800-652-1080

Ultra Low Flush Toilet Replacement Programs: 1-(408)-227-5557

FOR BUSINESSES
Ultra Low Flush Toilet Replacement Program: 1-(408)-360-9507

Water Efficient Clothes Washer Rebate Program: 1-(408)-265-2607 ext. 2707

Water Efficient Technologies Program: 1-(408)-265-2607 ext. 2951

What has Mountain View done for Water Conservation?
Santa Clara Valley Water District has been assisting the City of Mountain View with audits using the Irrigation Technical Assistance Program (ITAP) in the City's efforts to conserve water. For more information, contact Santa Clara Valley Water District at **(408) 265-2600**.

System Improvements

WATER MAIN REPLACEMENTS
- Miramonte Transmission Main Project replaced over two miles of 16" water transmission main with a new 24" diameter line on Miramonte Avenue between the Miramonte Avenue booster station and Central Expressway.
- Permanente Creek Crossing Project replaced the main near the Rengstorff House. This pipeline used a newer technology that directionally drilled beneath the creek without disruption to the creek.
- Rex Manor Neighborhood and Lola Lane Projects replaced approximately one mile of distribution mains, fire hydrants and residential water service lines.

OTHER PROJECTS
As part of Mountain View's commitment to water reliability, approximately one million dollars is dedicated annually for infrastructure improvements including these projects:

- Monta Loma neighborhood construction contract was awarded on a water main replacement project for 1-1/2 miles of distribution mains and residential service lines.
- Well 17 was rehabilitated and a new pump and level sensor installed.
- Well 22–A new drinking water well will be commissioned in 2003.